Chapter Six

FUTURE SOLID WASTE MANAGEMENT

Generation and Characterization

It is stated in the State Solid Waste Management Plan (**Plan**) that local governments that have not yet conducted a waste characterization study should do so. This study will allow local governments to make better decisions regarding the management of solid waste generated within their respective area. Decisions relating to disposal and recycling needs may be affected by this study.

Collection and Transfer.

Local governments that continue to use greenboxes or un-staffed drop-off centers face a greater risk of disposal of unauthorized waste, including hazardous waste and non-hazardous waste. Even though greenboxes are an acceptable method of collecting waste, local governments using greenboxes should consider replacing their greenbox system with staffed convenience drop-off centers.

Local governments continue to be faced with the increase in costs incurred for the transportation of solid waste. The decrease in the number of local disposal facilities will continue to impact the need for additional transfer stations.

Treatment.

As stated in the Plan, each local government should consider all treatment options and select the best available method of volume reduction for its solid waste management program.

Disposal.

The Plan states that the Department issues permits for the following types of landfills: MSW landfills, incinerator ash monofills, C&D landfills, ISW landfills, and tire disposal facilities.

<u>Table 10.5</u> (FY01 MSW Landfill Disposal, Disposal Rates, and Remaining Capacities) lists each MSW landfill with the corresponding permitted yearly rate of disposal, remaining capacity and life of each facility.

Public Education and Technical Assistance

The recycling rate has increased from 1.4 % in FY93 to 28.7% in FY02 (based on "defined MSW" recycling efforts). Each person in the State generated approximately 4.2 pounds of municipal solid waste during the fiscal year. As stated in the Plan, the goal of the Office is to continue to work toward both increasing the recycling rate and decreasing the solid waste generation rate. The Office will accomplish this through a combination of policy development, technical assistance, public education and grant funding.

Public Education Efforts.

The Office will continue to update on CD-ROM "Action for Cleaner Tomorrow," the environmental curriculum supplement. To promote the curriculum, the Office will continue to offer free workshops to teachers and other interested parties. Public service announcements will continue to be developed and aired across the state to educate residents about the importance of recycling and waste reduction. And the Office Web site will always maintain the most current facts, figures and publications related to recycling

Technical Assistance.

The Office will provide technical assistance to interested schools, businesses and local governments. This effort is designed to target those local governments not meeting their waste reduction or recycling goals. This could include setting up new recycling programs, adding a particular commodity to an already established program or meeting with local government officials.



Grants.

The Department issues grants to local governments in the form of solid waste recycling grants, waste tire grants and used oil grants. Legislation is pending which would change the way solid waste recycling grants are funded. This legislation would allow funds to be allocated based upon collection of a specific commodity or to target the needs of a specific local government instead of the current allocation, according to county population statistics.

Other legislation pending would allow the Department the use of tire funds for Department activity related to waste tires. This could include partial funding of salaries for staff involved in waste tire activities and also enable the Office to issue contracts for market development activities and demonstration projects. The legislation would also allow the Office to dedicate one (1) full-time position for a waste tire program coordinator.

Special Waste

As stated in the Plan, all operating MSW landfills must maintain an up-to-date Special Waste Analysis and Implementation Plan (SWAIP) that addresses the parameters for which each special waste, proposed for disposal, is to be analyzed and the rationale for selecting these parameters.

Import and Export

According to the annual reports submitted by the MSW landfills, almost one million tons were imported from out of state into South Carolina for disposal. Four South Carolina transfer stations (Fort Mill, Oconee, Pendleton, and Pickens) transport solid waste out of state for disposal for Anderson, Chester, Lancaster, Oconee, Pickens, and York counties. Based on county reporting, a total of 151,662 tons of solid waste was exported for disposal in MSW landfills in Georgia and North Carolina.

South Carolina continues to be concerned that the volume of waste imported from other states will continue to increase. The State will continue to accept this waste for disposal. However, measures are being implemented to ensure adequate MSW landfill capacity to handle the waste generated within South Carolina.

Innovative Technologies

As the population of the State and the amount of waste being disposed of in South Carolina landfills continue to grow, new and innovative technologies are being proposed to manage the waste. The Department is looking into the possibility of having landfills that operate as bioreactors, thereby speeding up decomposition of the waste, providing a means of leachate disposal, and ultimately providing additional airspace in each landfill. Other innovative methods of managing solid waste have been proposed to the Department, such as plasma arc technology. Using plasma arc technology, solid waste is heated to extremely high temperatures in the absence of oxygen to generate gases that can be used to generate electricity. The Department, through RD&D Permits, can allow the operation of these and other types of facilities in order to determine their success, while at the same time ensuring that each facility is constructed and operated in a manner that is protective of the environment.